



USPTO

[Subscribe \(Full Service\)](#) [Register \(Limited Service, Free\)](#) [Login](#)

 Search: ☒ The ACM Digital Library ☐ The Guide

+"rate control" +motion estimate compensate

SEARCH

THE ACM DIGITAL LIBRARY

[Feedback](#) [Report a problem](#) [Satisfaction survey](#)
Terms used **rate control motion estimate compensate**

Found 218 of 193,448

Sort results
by

relevance

Display
results

expanded form

☒ [Save results to a Binder](#)☒ [Search Tips](#)☐ Open results in a new windowTry an [Advanced Search](#)Try this search in [The ACM Guide](#)

Results 1 - 20 of 200

Result page: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [next](#)

Best 200 shown

Relevance scale ☐ ☐ ☐ ☐ ☐**1** [Low power motion estimation design using adaptive pixel truncation](#)

Zhong-Li He, Kai-Keung Chan, Chi-Ying Tsui, Ming L. Liou

August 1997 **Proceedings of the 1997 international symposium on Low power electronics and design**

Publisher: ACM Press

Full text available: [pdf\(754.40 KB\)](#) Additional Information: [full citation](#), [references](#), [citations](#)**2** [Session 4: video processing and transformation: Rate adaptation transcoding for precoded video streams](#)

Zhijun Lei, Nicolas D. Georganas

December 2002 **Proceedings of the tenth ACM international conference on Multimedia**

Publisher: ACM Press

Full text available: [pdf\(186.66 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

In order to transmit pre-encoded digital video over heterogeneous networks, it is necessary to employ transcoding techniques that convert pre-encoded video streams into streams having different bit rates and quality. The specified problem is referred to as rate shaping or rate adaptation. In this work, we propose a new rate control scheme for H.263+ based video transcoding. The proposed rate control scheme is comprised of Frame-Layer bit allocation and Macroblock-Layer rate control. At the frame ...

Keywords: rate adaptation, rate quantization, scene variations, video transcoding**3** [Doctoral symposium - session II: Complexity management for video encoders](#)

Yafan Zhao, Iain E. G. Richardson

December 2002 **Proceedings of the tenth ACM international conference on Multimedia**

Publisher: ACM Press

Full text available: [pdf\(83.92 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#)

Computational complexity is an important performance constraint for software-only video CODECs. The aim of this research is to develop a video coding system with variable, controllable computational complexity. Adaptive algorithms for DCT and motion estimation are proposed separately to reduce complexity of each function and maintain it at target level. An integrated approach to video CODEC complexity management is also addressed. This work will have potential benefit for a wide range of computa ...

4 [Services: Interactive media server with media synchronized RAID storage system](#)

Seung-Ho Lim, Yo-Won Jeong, Kyu-Ho Park



June 2005 **Proceedings of the international workshop on Network and operating systems support for digital audio and video NOSSDAV '05**

Publisher: ACM Press

Full text available: pdf(186.59 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

We propose an efficient placement algorithm and per-disk prefetching method to effectively support interactive operations in the media server. Our placement policy is incorporated with an encoder having a special bitcount control scheme that repeatedly tunes quantization parameters to adjust the bitcounts of video frames. This encoder can generate coded frames sub-stream video blocks whose sizes are synchronized with the RAID *stripe size*, so that when various fast-forward levels are acces ...

Keywords: bit count control, interactive media server, stripe size, video rate

5 Multimedia coding and security: Improved p-domain rate control and perceived quality optimizations for MPEG-4 real-time video applications



Michael Militzer, Maciej Suchomski, Klaus Meyer-Wegener

November 2003 **Proceedings of the eleventh ACM international conference on Multimedia**

Publisher: ACM Press

Full text available: pdf(412.39 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

The paper describes bit rate control for a one-pass MPEG-4 video encoding algorithm in order to make it suitable for real-time applications. The proposed control method is of low computational complexity and more accurate than previous approaches. In result, the rate-control buffer size which highly influences the latency between a video sender and receiver can be decreased significantly. Additionally, a solution is proposed for increasing the perceived quality by introducing an advanced bit all ...

Keywords: "MPEG-4", "bit rate control", "live streaming", "p-domain", "quality optimization", "real-time", "video encoding"

6 Poster 3: content track: A multiview video transcoder



Baochun Bai, Janelle Harms

November 2005 **Proceedings of the 13th annual ACM international conference on Multimedia MULTIMEDIA '05**

Publisher: ACM Press

Full text available: pdf(409.16 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Video transcoding can convert a compressed video from one format to another format. In this paper, we propose a novel multiview video transcoder, which is used for bit-rate scaling of multiple compressed synchronized video streams. Different from the traditional joint transcoder for independent multiple program transcoding, the multiview video transcoder has one unique task to decorrelate spatial redundancies among video streams. A fast disparity estimation algorithm with the GOP-based disparity ...

Keywords: 3D video, multiview video transcoder, video compression

7 Case studies: A low-cost and low-power multi-standard video encoder



R. Peset Llopis, R. Sethuraman, C. Alba Pinto, H. Peters, S. Maul, M. Oosterhuis

October 2003 **Proceedings of the 1st IEEE/ACM/IFIP international conference on Hardware/software codesign and system synthesis**

Publisher: ACM Press

Full text available: pdf(541.20 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Video encoders are an important IP block in mobile multimedia systems. In this paper, we describe a low-cost low-power multi-standard (MPEG4, JPEG, and H.263) video/image encoder. The low-cost and low-power aspects are achieved by the right choice of

algorithms and architectures. In the algorithm front, an embedded compression technique for reducing the size of loop memory has enabled a single-chip low-cost realization of the encoder. In the architectural front, an efficient hardware-software pa ...

Keywords: ASIPs, hardware/software partitioning, low-cost, low-power, multi-standard, video encoder

8 An MPEG-2 video encoder LSI with scalability for HDTV based on three-layer cooperative architecture



Mitsuo Ikeda, Toshio Kondo, Koyo Nitta, Kazuhito Suguri, Takeshi Yoshitome, Toshihiro Minami, Jiro Naganuma, Takeshi Ogura

January 1999 **Proceedings of the conference on Design, automation and test in Europe**

Publisher: ACM Press

Full text available: pdf(270.16 KB) Additional Information: [full citation](#), [index terms](#)

9 Dynamic frame rate control for video streams



Sassan Pejhan, Ti-Hao Chiang, Ya-Qin Zhang

October 1999 **Proceedings of the seventh ACM international conference on Multimedia (Part 1)**

Publisher: ACM Press

Full text available: pdf(531.89 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

A mechanism for dynamically varying the frame rate of pre-encoded video clips is described. An off-line encoder creates a high quality bitstream encoded at 30 fps, as well as separate files containing motion vectors for the same clip at lower frame rates. An on-line encoder decodes the bitstream (if necessary) and re-encodes it at lower frame-rates in real-time using the pre-computed, stored motion information. Dynamic Frame Rate Control, used in conjunction with dynamic bit-rate control, a ...

Keywords: fast forward control, frame rate control, video streaming

10 Adaptive rate controlled, robust video communication over packet wireless networks

G. R. Rajugopal, R. H. M. Hafez

June 1998 **Mobile Networks and Applications**, Volume 3 Issue 1

Publisher: Kluwer Academic Publishers

Full text available: pdf(977.91 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#), [review](#)

Video transmission over wireless packet networks is gaining importance due to the concept of universal personal communication. Further, it is considered an important step towards wireless multimedia. The challenge however is to achieve good video quality over mobile channels, where typically the channel conditions vary due to signal fading. Hence this paper investigates adaptive rate controlled video transmission for robust video communication under packet wireless environment. A combinatio ...

11 FPGA implementation of a novel, fast motion estimation algorithm for real-time video compression



S. Ramachandran, S. Srinivasan

February 2001 **Proceedings of the 2001 ACM/SIGDA ninth international symposium on Field programmable gate arrays**

Publisher: ACM Press

Full text available: pdf(450.80 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

A novel block matching algorithm for motion estimation in a video frame sequence, well suited for a high performance FPGA implementation is presented in this paper. The



Welcome United States Patent and Trademark Office

☐ Search Results

BROWSE

SEARCH

IEEE XPLORE GUIDE

SUPPORT

Results for "((((rate <near/3> control)) <and>(process <or> compute) <phrase> (cost &l..."

Your search matched 36 of 1450046 documents.

A maximum of 100 results are displayed, 25 to a page, sorted by Relevance in Descending order.

e-mail printer friendly

» Search Options

[View Session History](#)[New Search](#)

Modify Search

((((rate <near/3> control)) <and>(process <or> compute) <phrase> (cost <or> time

Search >☐ Check to search only within this results setDisplay Format: ☒ Citation ☐ Citation & Abstract

» Key

IEEE JNL IEEE Journal or Magazine

IEE JNL IEE Journal or Magazine

IEEE CNF IEEE Conference Proceeding

IEE CNF IEE Conference Proceeding

IEEE STD IEEE Standard

[view selected items](#)[Select All](#) [Deselect All](#)

1-25 | 26-36

- ☐ 1. **MPEG-4 and rate-distortion-based shape-coding techniques**
Katsaggelos, A.K.; Kondi, L.P.; Meier, F.W.; Ostermann, J.; Schuster, G.M.;
[Proceedings of the IEEE](#)
Volume 86, Issue 6, June 1998 Page(s):1126 - 1154
Digital Object Identifier 10.1109/5.687833
[AbstractPlus](#) | [References](#) | Full Text: [PDF\(672 KB\)](#) IEEE JNL
[Rights and Permissions](#)
- ☐ 2. **Image and video compression algorithms based on recovery techniques using mean field annealing**
Ozcelik, T.; Brailean, J.C.; Katsaggelos, A.K.;
[Proceedings of the IEEE](#)
Volume 83, Issue 2, Feb. 1995 Page(s):304 - 316
Digital Object Identifier 10.1109/5.364460
[AbstractPlus](#) | Full Text: [PDF\(1408 KB\)](#) IEEE JNL
[Rights and Permissions](#)
- ☐ 3. **Image Sequence Compression Using a Pel-Recursive Motion-Compensated Technique**
Moorhead, R., II; Rajala, S.; Cook, L.;
[Selected Areas in Communications, IEEE Journal on](#)
Volume 5, Issue 7, Aug 1987 Page(s):1100 - 1114
[AbstractPlus](#) | Full Text: [PDF\(1552 KB\)](#) IEEE JNL
[Rights and Permissions](#)
- ☐ 4. **HD-VCR codec for studio application using quadtree structured binary symbols in wavelet transform domain**
Hyun Meen Jung; Yongkyu Kim; Seunghyeon Rhee; Hung-Yeop Sung; Kyu Tae Park;
[Circuits and Systems for Video Technology, IEEE Transactions on](#)
Volume 6, Issue 5, Oct. 1996 Page(s):506 - 513
Digital Object Identifier 10.1109/76.538932
[AbstractPlus](#) | [References](#) | Full Text: [PDF\(820 KB\)](#) IEEE JNL
[Rights and Permissions](#)
- ☐ 5. **Bandwidth renegotiation for VBR video over ATM networks**
Reininger, D.J.; Dipankar Raychaudhuri; Hui, J.Y.;
[Selected Areas in Communications, IEEE Journal on](#)
Volume 14, Issue 6, Aug. 1996 Page(s):1076 - 1086
Digital Object Identifier 10.1109/49.508279
[AbstractPlus](#) | Full Text: [PDF\(992 KB\)](#) IEEE JNL
[Rights and Permissions](#)

6. **Rate-distortion optimized frame type selection for MPEG encoding**
Jungwoo Lee; Dickinson, B.W.;
Circuits and Systems for Video Technology, IEEE Transactions on
Volume 7, Issue 3, June 1997 Page(s):501 - 510
Digital Object Identifier 10.1109/76.585929
[AbstractPlus](#) | [References](#) | Full Text: [PDF\(288 KB\)](#) IEEE JNL
[Rights and Permissions](#)
7. **A thresholding multiresolution block matching algorithm**
Shi, Y.Q.; Xia, X.;
Circuits and Systems for Video Technology, IEEE Transactions on
Volume 7, Issue 2, April 1997 Page(s):437 - 440
Digital Object Identifier 10.1109/76.564124
[AbstractPlus](#) | [References](#) | Full Text: [PDF\(104 KB\)](#) IEEE JNL
[Rights and Permissions](#)
8. **A programmable video codec system for low-bit-rate communication**
Matsuo, M.; Fujimoto, H.; Kohashi, Y.; Toujima, M.; Yonezawa, T.; Kurohmaru, S.; Okamoto, K.;
Lizuka, Y.; Nakajima, H.; Inoue, H.; Iwasaki, S.; Michiyama, J.;
Consumer Electronics, IEEE Transactions on
Volume 43, Issue 3, Aug. 1997 Page(s):903 - 910
Digital Object Identifier 10.1109/30.628758
[AbstractPlus](#) | [References](#) | Full Text: [PDF\(784 KB\)](#) IEEE JNL
[Rights and Permissions](#)
9. **Interframe coding using two-stage variable block-size multiresolution motion estimation and wavelet decomposition**
Seongman Kim; Seunghyeon Rhee; Jun Geun Jeon; Kyu Tae Park;
Circuits and Systems for Video Technology, IEEE Transactions on
Volume 8, Issue 4, Aug. 1998 Page(s):399 - 410
Digital Object Identifier 10.1109/76.709407
[AbstractPlus](#) | [References](#) | Full Text: [PDF\(376 KB\)](#) IEEE JNL
[Rights and Permissions](#)
10. **Object-oriented H.263 compatible video coding platform for conferencing applications**
Hartung, J.; Jacquin, A.; Pawlyk, J.; Rosenberg, J.; Okada, H.; Crouch, P.E.;
Selected Areas in Communications, IEEE Journal on
Volume 16, Issue 1, Jan. 1998 Page(s):42 - 55
Digital Object Identifier 10.1109/49.650919
[AbstractPlus](#) | [References](#) | Full Text: [PDF\(284 KB\)](#) IEEE JNL
[Rights and Permissions](#)
11. **SuperENC: MPEG-2 video encoder chip**
Ikeda, M.; Kondo, T.; Nitta, K.; Suguri, K.; Yoshitome, T.; Minami, T.; Iwasaki, H.; Ochiai, K.;
Naganuma, J.; Endo, M.; Tashiro, Y.; Watanabe, H.; Kobayashi, N.; Okubo, T.; Kasai, R.;
Micro, IEEE
Volume 19, Issue 4, Jul-Aug 1999 Page(s):56 - 65
Digital Object Identifier 10.1109/40.782568
[AbstractPlus](#) | [References](#) | Full Text: [PDF\(872 KB\)](#) IEEE JNL
[Rights and Permissions](#)
12. **Motion-compensated 3-D subband coding of video**
Seung-Jong Choi; Woods, J.W.;
Image Processing, IEEE Transactions on
Volume 8, Issue 2, Feb. 1999 Page(s):155 - 167
Digital Object Identifier 10.1109/83.743851
[AbstractPlus](#) | [References](#) | Full Text: [PDF\(428 KB\)](#) IEEE JNL
[Rights and Permissions](#)
13. **Multiview video sequence analysis, compression, and virtual viewpoint synthesis**
Ru-Shang Wang; Yao Wang;
Circuits and Systems for Video Technology, IEEE Transactions on
Volume 10, Issue 3, April 2000 Page(s):397 - 410



Welcome United States Patent and Trademark Office

☐ Search Results

BROWSE

SEARCH

IEEE XPLORE GUIDE

SUPPORT

Results for "((((rate <near/3> control)<in>ab) <and>(process <or> compute) <phrase>..."

Your search matched 5 of 1450046 documents.

A maximum of 100 results are displayed, 25 to a page, sorted by Relevance in Descending order.

☒ e-mail printer friendly

» Search Options

[View Session History](#)
[New Search](#)

Modify Search

☐ Check to search only within this results set
Display Format: ☒ Citation ☐ Citation & Abstract

» Key

IEEE JNL IEEE Journal or Magazine

IEE JNL IEE Journal or Magazine

IEEE CNF IEEE Conference Proceeding

IEE CNF IEE Conference Proceeding

IEEE STD IEEE Standard

 [Select All](#) [Deselect All](#)

- ☐ 1. **Bandwidth renegotiation for VBR video over ATM networks**
 Reininger, D.J.; Dipankar Raychaudhuri; Hui, J.Y.;
[Selected Areas in Communications, IEEE Journal on](#)
 Volume 14, Issue 6, Aug. 1996 Page(s):1076 - 1086
 Digital Object Identifier 10.1109/49.508279
[AbstractPlus](#) | Full Text: [PDF](#)(992 KB) IEEE JNL
[Rights and Permissions](#)
- ☐ 2. **Object-oriented H.263 compatible video coding platform for conferencing applications**
 Hartung, J.; Jacquin, A.; Pawlyk, J.; Rosenberg, J.; Okada, H.; Crouch, P.E.;
[Selected Areas in Communications, IEEE Journal on](#)
 Volume 16, Issue 1, Jan. 1998 Page(s):42 - 55
 Digital Object Identifier 10.1109/49.650919
[AbstractPlus](#) | [References](#) | Full Text: [PDF](#)(284 KB) IEEE JNL
[Rights and Permissions](#)
- ☐ 3. **Adaptive image feature prediction and control for visual tracking with a hand-eye coordinated camera**
 Feddema, J.T.; Lee, C.S.G.;
[Systems, Man and Cybernetics, IEEE Transactions on](#)
 Volume 20, Issue 5, Sept.-Oct. 1990 Page(s):1172 - 1183
 Digital Object Identifier 10.1109/21.59979
[AbstractPlus](#) | Full Text: [PDF](#)(880 KB) IEEE JNL
[Rights and Permissions](#)
- ☐ 4. **Layered DCT still image compression**
 Jiankun Li; Jin Li; Kuo, C.-C.J.;
[Circuits and Systems for Video Technology, IEEE Transactions on](#)
 Volume 7, Issue 2, April 1997 Page(s):440 - 443
 Digital Object Identifier 10.1109/76.564125
[AbstractPlus](#) | [References](#) | Full Text: [PDF](#)(104 KB) IEEE JNL
[Rights and Permissions](#)
- ☐ 5. **VLSI implementation of very low-power motion estimator for scalable coding systems**
 Shih-Chang Hsia;
[System-on-Chip for Real-Time Applications, 2003. Proceedings. The 3rd IEEE International Workshop on](#)
 30 June-2 July 2003 Page(s):167 - 170
[AbstractPlus](#) | Full Text: [PDF](#)(264 KB) IEEE CNF
[Rights and Permissions](#)


[SPIE DL home](#) | [Scitation home](#) | [Search SPIN](#) | [help](#) | [contact](#) | [sign in](#) | [sign out](#)

SPIE Digital Library

[Proceedings](#)
[Journals](#)

SPIE—The International Society for Optical Engineering

[Home](#) » [Advanced Search](#) » [Search Results](#)
[My SPIE Subscription](#) | [My E-mail Alerts](#) | [My Article Collections](#)

SEARCH DIGITAL LIBRARY

[\[Back to Search Query\]](#) | [Start New Search.](#) | [Searching Hints](#)

[Advanced Search](#)

BROWSE PROCEEDINGS

☒ [Proceedings](#)

- ☐ [By Year](#)
- ☐ [By Symposium](#)
- ☐ [By Volume No.](#)
- ☐ [By Volume Title](#)
- ☐ [By Technology](#)

BROWSE JOURNALS

☒ [Journals](#)

- ☐ [Optical Engineering](#)
- ☐ [J. Electronic Imaging](#)
- ☐ [J. Biomedical Optics](#)
- ☐ [J. Microlithography, Microfabrication, and Microsystems](#)

SUBSCRIPTIONS & PRICING

- ☒ [Institutions & Corporations](#)
- ☒ [Personal subscriptions](#)

GENERAL INFORMATION

- ☒ [About the Digital Library](#)
- ☒ [Terms of Use](#)
- ☒ [SPIE Home](#)

Search Results

You were searching for : (((rate <near/3> control) <and>(motion <near/5> (estimate <or> compensate)))) <AND> usdate <=23-jun-2003

You found 4 out of 230634 (4 returned)

Documents 1 - 4 listed on this page

Options for selected Articles

Adding to MyArticles will open a second window (Scitation login required). **YOUR CART**

[Related SPIE Products]

100%

1. ☐ **Rate control for fully fine-grained scalable video coders**
Josep Prades-Nebot, Gregory W. Cook, and Edward J. Delp III
Proc. SPIE **4671**, 828 (2002) **Full Text:** [PDF (413 kB)] (12 pages)

98%

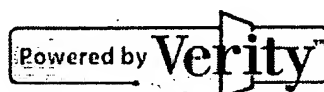
2. ☐ **Curvature analysis approach to shape coding using B-splines**
Janez Zaletelj and Jurij F. Tasic
Proc. SPIE **4310**, 676 (2000) **Full Text:** [PDF (224 kB)] (10 pages)

98%

3. ☐ **Video codec incorporating block-based multihypothesis motion-compensated prediction**
Markus Flierl, Thomas Wiegand, and Bernd Girod
Proc. SPIE **4067**, 238 (2000) **Full Text:** [PDF (974 kB)] (12 pages)

97%

4. ☐ **34/45-Mbps 3D HDTV digital coding scheme using modified motion compensation with disparity vectors**
Sei Naito and Shuichi Matsumoto
Proc. SPIE **3653**, 1082 (1998) **Full Text:** [PDF (223 kB)] (8 pages)


[home](#) | [proceedings](#) | [journals](#)
[Terms of Use](#) | [Privacy Policy](#) | [Contact](#)